What is claimed is:

1. A method for manufacturing a transformer winding, comprising:

winding an electrical conductor into a first plurality of turns;

placing an electrically insulating material having adhesive thereon over the first plurality of turns;

winding the electrical conductor into a second plurality of turns over the electrically insulating material; and

melting and curing the adhesive by energizing the electrical conductor so that a current greater than a rated current of the transformer winding flows through the electrical conductor.

2. The method of claim 1, further comprising providing a power source, electrically coupling the electrical conductor to the power source, and energizing the electrical conductor using the power source.

3. The method of claim 2, wherein the power source is a direct-current power source.

4. The method of claim 2, further comprising providing a variable power regulator, electrically coupling the variable power regulator to the power source and the electrical conductor, and adjusting the current greater than a rated current of the transformer winding using the voltage regulator.

5. The method of claim 1, wherein melting and curing the adhesive by energizing the electrical conductor so that a current greater than a rated current of the

transformer winding flows through the electrical conductor comprises melting and curing the adhesive by energizing the electrical conductor so that a direct current greater than the rated current of the transformer winding flows through the electrical conductor.

6. The method of claim 1, wherein melting and curing the adhesive by energizing the electrical conductor so that a current greater than a rated current of the transformer winding flows through the electrical conductor comprises energizing the electrical conductor so that the current greater than a rated current of the transformer winding is initially approximately three times to approximately five times the rated current of the transformer winding.

7. The method of claim 6, further comprising incrementally reducing the current greater than a rated current of the transformer winding from an initial value until a temperature of the electrical conductor stabilizes within a predetermined range.

8. The method of claim 1, further comprising adjusting the current greater than a rated current of the transformer winding so that a temperature of the electrical conductor remains within a predetermined range.

9. The method of claim 8, wherein adjusting the current greater than a rated current of the transformer winding so that a temperature of the electrical conductor remains within a predetermined range comprises adjusting the current greater than a rated current of the transformer winding so that the temperature of the

electrical conductor remains within the predetermined range for a predetermined period.

10. The method of claim 1, wherein melting and curing the adhesive by energizing the electrical conductor so that a current greater than a rated current of the transformer winding flows through the electrical conductor comprises heating the adhesive by energizing the electrical conductor so that the current greater than a rated current of the transformer winding flows through the electrical conductor.

11. The method of claim 2, wherein electrically coupling the electrical conductor to the power source, and energizing the electrical conductor using the power source comprises electrically coupling the electrical conductor and a second electrical conductor of a second transformer winding to the power source, and energizing the electrical conductor and the second electrical conductor on a simultaneous basis using the power source.

12. The method of claim 1, further comprising providing a voltmeter and an ammeter, electrically coupling the voltmeter and the ammeter to the electrical conductor, and measuring a voltage across the electrical conductor and the current greater than a rated current of the transformer winding using the voltmeter and the ammeter.

13. The method of claim 12, further comprising calculating a temperature of the electrical conductor at a given time based on a resistance of the electrical

conductor at the given time, an initial resistance of the electrical conductor, and an initial temperature of the electrical conductor.

14. The method of claim 13, further comprising calculating the resistance of the electrical conductor at the given time based on a voltage across the electrical conductor at the given time and the current greater than a rated current of the transformer winding at the given time.

15. The method of claim 8, wherein the predetermined range is approximately 130° C ± approximately 15° C.

16. The method of claim 9, wherein the predetermined period is approximately twenty to approximately ninety minutes.

17. The method of claim 7, wherein incrementally reducing the direct current greater than a rated current of the transformer winding from an initial value until a temperature of the electrical conductor stabilizes within a predetermined range comprises reducing the direct current greater than a rated current of the transformer in increments of approximately 1° C.

18. The method of claim 1, wherein the electrically-insulating material is heat-curable epoxy diamond pattern coated kraft paper.

19. The method of claim 1, wherein winding an electrical conductor into a first plurality of turns comprises winding the electrical conductor around a winding leg of a core of a transformer.

20. The method of claim 1, wherein the adhesive is a "B" stage epoxy adhesive.

21. A manufacturing method for a transformer winding comprising a first and a second layer of turns of an electrical conductor, and an electrically insulating material positioned between the first and second layers of turns and having adhesive on at least one side thereof, the method comprising electrically coupling the electrical conductor to a power source and energizing the electrical conductor using the power source so that a current flows through the electrical conductor and heats the electrical conductor thereby causing the adhesive to at least one of melt and cure.

22. The method of claim 21, wherein the power source is a direct-current power source.

23. A method for curing adhesive on an insulating material in a transformer winding, comprising causing a current greater than a rated current of the transformer winding to pass through the transformer winding to heat the transformer winding to a temperature within a range of temperatures suitable for curing the adhesive, and adjusting the current greater than a rated current of the transformer winding to maintain the temperature of the transformer winding within the range of temperatures suitable for curing the adhesive for a predetermined period.

24. The method of claim 23, further comprising providing a power source, electrically coupling the transformer winding to the power source, and energizing the transformer winding using the power source to cause the current greater than a rated current of the transformer winding to pass through the transformer winding.

25. The method of claim 24, wherein the power source is a direct-current power source.